

**REMARKS**

Applicant hereby responds to the Office Action of September 7, 2005. Prior to this reply, claims 1-27 were pending in the above-referenced patent application. Through this reply, new claims 28 and 29 have been added. As such, claims 1-29 are now pending in the above-referenced patent applications.

Claims 1-27 are pending in the above-referenced patent application. Claims 1, 4, 5, 10, 13-15, 19, 20, 23 and 24 were rejected. Claims 2, 3, 6-9, 11, 12, 16-18, 21, 22 and 25-27 were objected to as being dependent on rejected base claims, but were deemed allowable if rewritten in independent form including limitations of base claims and any intervening claims. Applicant wishes to thank the Examiner for detailing the allowable claims.

Claims 4, 5, 9, 10, 14, 20 and 24 have been amended to further clarify the claimed limitations. Claim 9 has been amended to overcome informality objections. New claims 28 and 29 add further limitations to Claim 1, which limitations are not disclosed by the references for at least the reasons provided below in response to the rejection of the original claims (no new matter has been added).

**Drawings**

Fig. 7 was objected to for missing the reference number 700. A replacement sheet for Fig. 7 is enclosed herewith which includes the reference number 700 for the system shown therein, as described in the specification. No new matter has been added.

**Specification**

The specification, page 7, line 14, was objected to due to a typographical error. The specification has been amended to overcome the objection.

**Claims Objections**

Claim 9 was objected to due to informalities, wherein the Examiner states the term “and/or” is vague. Claim 9 has been amended to overcome the objection.

**Claim Rejections under 35 USC 102(b)**

Claims 1, 4, 5, 10, 13-15, 20, 23 and 24 were rejected under 35 USC 102(b) as being anticipated by USPN 6,066,792 to Sone (“Sone ‘792”). Rejections of the claims are respectfully traversed because for at least the following reasons Sone’ 792 does teach all of the claimed limitations.

As per **Claim 1**, it is respectfully submitted that despite the Examiner’s interpretation, Sone ‘792 does not disclose that the disk drive 151 is a generator device that produces an accompaniment sound, as claimed. Indeed, disk drive 151 stores programs from floppy 150, which programs control the music apparatus. Further, in

Sone '792 the AMP 110 is used for both vocal output and mixed output, and by definition, cannot be "effecting dedicated output of the singing voice along with the song", as claimed herein.

Further, there is no teaching or description in Sone '792 which states that any signal from the microphone 107 is output from a dedicated vocal channel separate from the output of the mixer 106. Indeed, the only description of the connection between the microphone signals and the mixer 106 in col. 4, lines 21-33, says nothing about a dedicated vocal output separate from the mixer output. In col. 4, lines 21-33, Sone '792 states:

On the other hand, a singing voice signal inputted from a microphone 107 is converted by an A/D converter 108 into a digital signal. The digital signal is imparted with an effect such as echo, and is inputted in the mixer 106. The mixer 106 mixes the karaoke performance signals inputted from the performance reproducer ("a" channel) 105a and the performance reproducer ("b" channel) 105b with the singing voice signal inputted from an effect DSP 109 at an appropriate mixing ratio, then converts the mixed signal into an analog signal, and outputs the analog signal to an amplifier (AMP) 110. The amplifier 110 amplifies the inputted analog signal. The amplified analog signal is outputted from a loudspeaker 111.

As is glaringly obvious from the above passage, by contrast to the claimed limitations herein, Sone '792 specifically states that output of the microphone 107 is

converted to digital signal in the A/D 108, then processed in the DSP unit and mixed with the performance outputs 105a and 105b by the mixer 106. Mixed output from the mixer 106 is amplified by the AMP 110 and output by a speaker 111. Accordingly, the system of Sone '792 suffers from the same shortcomings as other conventional systems, which the present invention addresses. In Sone '792, there is no teaching of a dedicated vocal channel which generates vocal output separate from mixed output of a main channel, and the Patent Office has not met burden of proof under 35 USC 102(b) in referring to clear description in Sone '792 which teaches the claimed limitations. As such, it is respectfully submitted that Claim 1, and all claims dependent therefrom, should be allowed.

As per **Claim 4**, for at least the reasons provided in relation to Claim 1, it is respectfully submitted that Sone '792 does not disclose that the mixed output and the vocal output are channeled such that the vocal output is transduced separately from the mixed output, as claimed. In Sone '792, the microphone signal is transduced along with the performance producer outputs 105a and 105b. Indeed, in Sone '792 there is no vocal (e.g., voice) output separate from a mixed output, wherein the mixed output which is a mix of a singing voice and an accompaniment sound, as claimed.

As per **Claim 5**, it is respectfully submitted that Sone '792 does not disclose that wherein the main channel further comprises a first amplification channel for amplifying the mixed output, and the vocal channel further comprises a second amplification channel

for amplifying the vocal output separate from the amplified mixed output, as claimed.

Sone '792 does not disclose separate amplification channels as claimed.

As per **Claims 10 and 20**, these claims are allowable for at least the reasons provided in relation to Claim 1. Further, Sone '792 does not disclose that the vocal channel and the main channel generate the vocal output and the mixed output, respectively, wherein the vocal channel generates the vocal output signal, for transducing separate from the mixed output signal, thereby effecting dedicated play of the singing voice along with the karaoke song, as claimed. For at least these reasons, Claims 10, 20 and claims dependent therefrom should be allowed.

**Claims 14 and 24** were rejected for essentially the same reasons as rejection of Claim 5, and should be allowed for at least the reasons provided in relation to Claim 5.

**Claim Rejection under 35 USC103 (a)**

**Claim 19** was rejected under 35 USC 103(a) as being anticipated by Sone in view of USPN 5,804,572 to Sone et al. ("Sone '572"). Applicant notes that the Examiner utilized USPN 6,066,792 for Sone et al. however Applicant assumes that the Examiner meant USPN 5,804,572. As such, below Applicant responds accordingly. If the Examiner intended otherwise, Applicant requests clarification and expressly reserves the right to respond accordingly. Rejections of the claims are respectfully traversed because for at least the following reasons Sone' 792 and Sone '572, alone or in combination, do

not disclose all of the claimed limitations. No prima facie case of obviousness has been established.

As discussed, Sone '792 does not disclose all of the limitations of the base claim 10. Further, as the Examiner also states, Sone '792 does not disclose all of the limitations of Claim 19. However, the Examiner interprets Sone '572 to disclose such limitations. Specifically, Sone '572 does not disclose the claimed limitations.

Sone '572 does not disclose a second input device that collects another singing voice and generates a second vocal signal, wherein the second vocal signal is provided to the vocal channel, as claimed. First, Applicant respectfully traverses the Examiner's conclusion that the second vocal signal is provided to the vocal channel, is old and well known. The Examiner has not produced a qualifying reference that teaches as such. In Sone '572, there is no vocal channel, or separate/dedicated vocal channel. No such feature is described in Sone '572 and the Examiner has not pointed to such description in Sone '572. Indeed, outputs from microphones 47a and 47b are all put into unit 42 along with outputs of DSP 41, tone generator 38, unit 39, etc. Therefore, despite the Examiner's interpretation, 47a, 47b and 42 do not form a separate/dedicated vocal channel as claimed. Neither Sone '572 nor Sone '792, alone or in combination, teach such limitations.

The Examiner states that it would have been obvious to modify Sone '792 with second input device of Sone '572 to provide the effect of dedicated output of the second singing voice along the song. Applicant respectfully disagrees.

It is well settled that in order for a modification or combination of the prior art to be valid, the prior art itself must suggest the modification or combination, "...invention cannot be found obvious unless there was some **explicit** teaching or suggestion in the art to motivate one of ordinary skill to combine elements so as to create the same invention." *Winner International Royalty Corp. v. Wang*, No. 96-2107, 48 USPQ.2d 1139, 1140 (D.C.D.C. 1998) (emphasis added). "The prior art **must provide** one of ordinary skill in the art the **motivation** to make the proposed molecular modifications needed to arrive at the claimed compound." *In re Jones*, 958 F.2d 347, 21 USPQ.2d 1941, 1944 (Fed. Cir. 1992) (emphasis added). No motivation or suggestion is provided in the references to combine them as the Examiner does.

Even if the modification was legally justified, it still would not render Applicants' claimed invention obvious. The Patent Office admits that Sone '792 does not teach all limitations in Claim 19. Therefore, the Patent Office attempts to modify Sone '792 in order to teach Applicant's claimed invention. However, as discussed, there is no teaching in Sone '572 of the claimed limitations. It is respectfully submitted that that the Patent Office has not meet its burden of establishing a prima facie case of obviousness. The effort required to combine the teachings of Sone '572 and Sone '792 would require a substantial undertaking and numerous elements which would not be obvious. The Patent

Office is improperly using “hindsight” and the teachings of Applicant’s own claimed invention in order to combine references to render Applicant’s claims obvious. The Patent Office Action admits that Sone ‘792 fails to teach all of the limitations of Applicant’s claimed invention. However, the Patent Office improperly attempts to modify Sone ‘792 in an attempt to achieve Applicant’s claimed invention.

Even if the references can be legally combined, the result does not disclose the claimed limitations. As discussed, Sone ‘792 does not disclose the limitations of a separate mixed output and a separate vocal output. Nor does Sone ‘572 disclose such limitations. Therefore, modifying Sone ‘792 according to Sone ‘572 simply results in adding another microphone signal to the mixer 106 of Sone ‘792, which still does not provide a second input device that collects another singing voice and generates a second vocal signal, wherein the second vocal signal is provided to the vocal channel, which is separate from the mixed output, as claimed. One of ordinary skill in the art would not look to these references to achieve the solutions provided by the present invention.

### **New Claims**

New claims 28 and 29 add further separate channel limitations to Claim 1, which limitations are not disclosed by the references for at least the reasons provided above in response to the rejection of the original claims.

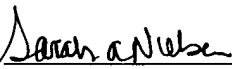


**CONCLUSION**

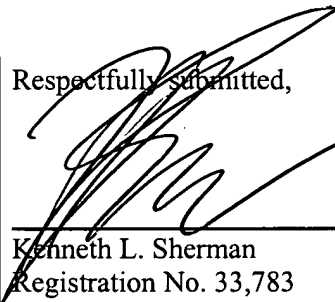
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01-1960. A copy of this page is enclosed for this purpose.

For these, and other, reasons, Applicants believe that the claims are in condition for allowance. Reconsideration, re-examination, and allowance of all claims are respectfully requested.

<p align="center"><b><u>CERTIFICATE OF MAILING</u></b></p> <p>I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on December <u>21</u>, 2005.</p> <p>By Sarah A. Nielsen</p> <p> Signature</p> <p>December 6, 2005</p>
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Respectfully submitted,

  
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